

REMARKS

Applicants' attorney thanks the Examiner for his comments. Independent Claim 21 has been amended to include the limitations of previous Claim 27, and Claim 27 has been canceled. Independent Claim 50 has been amended to include the limitations of previous Claim 59, and Claim 59 has been canceled. Independent Claim 53 has been amended to include the limitations of previous Claim 60, and Claim 60 has been canceled. Each of the independent claims requires each film layer and the fibrous nonwoven web to include a biodegradable thermoplastic polymer.

a) Claim Rejections Based On 35 U.S.C. §102(a)

The Examiner rejected Claims 21-22, 24-26, 31, 35-36, 38-42, 44-49, 53-54 and 56-60 under 35 U.S.C. §102(b) as anticipated by Branham et al. (U.S. Patent 6,261,674). This rejection is respectfully traversed.

Branham et al. teaches a film/nonwoven laminate including a film having 8 to 17,000 microlayers and a nonwoven web. The film includes a plurality of first film microlayers formed of a more breathable polymer and a plurality of second film layers formed of a less breathable polymer.

The first (more breathable) polymer can be polyethylene oxide, polycaprolactone or polybutylene succinate. While the first polymer may be one which is inherently biodegradable, the first polymer is selected based on breathability and not based on an ability to biodegrade (Col. 2, lines 32-46). The reference does not disclose or suggest biodegradability as a motive.

The second (less breathable) polymer can be a polyolefin such as linear low density or polypropylene (Col. 2, lines 46-48). These polymers are not biodegradable. In an alternative embodiment, the first and second polymers can both have high water vapor transmission rates, or can both have low water vapor transmission rates. In either case, the first and second polymers should have different water vapor transmission rates and, thus, are different polymers (Col. 6, lines 39-45).

Contrary to the Examiner's assertion (Office Action, p. 2), the reference does not teach forming the first and second layers using the same materials. Even where the first

and second layers are both highly breathable, they are formed of different breathable polymers. The reference does not disclose how the polymers differ, and does not disclose forming the first and second layers using biodegradable polymers.

The fibrous nonwoven web can be formed of cellulose, polyester, polyamide, polypropylene or the like (Col. 6, lines 4-8). The reference does not disclose using biodegradable thermoplastic polymer fibers as required by Applicants' claims. Because the objective of the reference is to provide a breathable laminate and not a biodegradable laminate, the reference provides no motivation to substitute biodegradable thermoplastic fibers for the disclosed fibers. Contrary to Applicants' claims, the reference provides no teaching or suggestion to form a laminate using a biodegradable thermoplastic film and a biodegradable thermoplastic nonwoven web.

For these reasons, Branham et al. does not anticipate (or render obvious) Claims 21-22, 24-26, 31, 35-36, 38-42, 44-49, 53-54 or 56-58. Claims 59-60 have been canceled, because their limitations are now included in Claims 50 and 53.

Notably, the Examiner has not set forth a basis for rejecting Claims 59 and 60. The Examiner stated only that the claims were rejected under 35 U.S.C. §102(a) as anticipated by Branham et al. "as set forth in the previous action." However, the previous action does not contain a rejection of Claims 59 and 60.

Accordingly, Applicants request an Office Action addressing the merits of previous Claims 59 and 60, which have now been combined with Claims 50 and 53. For instance, Claims 50 and 53 should be allowed because Claims 59 and 60 (now incorporated into Claims 50 and 53) were never properly rejected. If the Examiner feels that Claims 50 and 53 are not allowable, then Applicants should be given a full and fair opportunity to respond to any basis for rejecting them.

b) Claim Rejections Based On 35 U.S.C. §103(a)

The Examiner rejected Claims 23 and 27 under 35 U.S.C. §103(a) as obvious over Branham et al. in view of LaVon et al. (U.S. Patent 6,050,985). This rejection is respectfully traversed.

The limitations of Claim 27 have been incorporated into independent Claim 21. Claim 21 requires the nonwoven web to include a biodegradable thermoplastic polymer. As explained above, Branham et al. does not disclose a fibrous nonwoven web formed using a biodegradable thermoplastic polymer, and provides no motivation to substitute biodegradable thermoplastic fibers for the disclosed fibers.

LaVon et al. discloses an absorbent article such as a diaper having an extendible waist belt. The extendible waist belt may be formed of a structural elastic-like film web, referred to as a SELF web (Col. 10, lines 24-29). As illustrated in Figs. 5A and 5B, the SELF web is actually a film which has been selectively deformed to provide controlled elastic properties. The SELF web is preferably comprised of linear low density polyethylene, and may be comprised of other polyolefins and/or blends thereof with other materials. Examples of other polymeric materials include polyester, polyurethanes, compostable or biodegradable polymers, and breathable polymers (Col. 10, lines 30-45). The SELF web does not include filler particles (unlike the film component of Applicants' claims), and does not have voids around filler particles to facilitate the passage of water vapor.

The SELF web may be combined with another material, such as an apertured film or foam or a fibrous nonwoven web, to form a laminate (Col. 17, line 58 – Col. 18, line 22). The reference does not disclose the types of polymers used to make a fibrous nonwoven web.

In summary, neither Branham et al. nor LaVon et al. discloses or suggests a breathable laminate of a film and a fibrous nonwoven web, wherein both the film and the fibrous nonwoven web are formed using biodegradable thermoplastic polymers. Branham et al. discloses a laminate wherein one or more film layers may include a breathable polymer which is inherently biodegradable, yet provides no suggestion or motivation to form every film layer using a biodegradable polymer. Branham et al. does not disclose a fibrous nonwoven web formed using a biodegradable thermoplastic polymer. LaVon et al. discloses a SELF web (a deformed film) which may or may not be laminated to a fibrous nonwoven web. The SELF web may be formed of a biodegradable polymer, although most of the

polymers disclosed are not biodegradable. LaVon et al. does not disclose forming the fibrous nonwoven web using a biodegradable thermoplastic polymer.

Furthermore, there is no suggestion to combine the references in the manner proposed by the Examiner. Branham et al. is concerned primarily with making a breathable film using selected polymers, and provides no motivation to form a fibrous nonwoven web or a laminate using biodegradable thermoplastic polymer(s) in every layer (including the fibrous nonwoven web). LaVon et al. is concerned primarily with controlled elasticity, and provides no motivation to form a fibrous nonwoven web or a laminate using biodegradable thermoplastic polymer(s) in every layer (including the fibrous nonwoven web).

When the Examiner proposes combining references, he is required to identify a suggestion or motivation in the art which would lead a person of ordinary skill in the art to arrive at the claimed invention. He is not permitted to use Applicants' claims as a starting point and work backwards using hindsight. Instead, he is required to use the prior art as a starting point, then show how a person skilled in the art would have been motivated to move forward toward Applicants' claims. No suggestion or motivation has been identified which would lead a person skilled in the art to make Applicants' invention using the combined disclosures of Branham et al. and LaVon et al.

The Examiner rejected Claims 37 and 50-52 under 35 U.S.C. §103(a) as obvious over Branham et al. in view of Zhao et al. (U.S. Patent 6,514,602). This rejection is respectfully traversed. Claim 37 depends from Claim 21, and is patentable for at least the same reasons. Independent Claim 50 (like Claim 21) requires a biodegradable thermoplastic polymer in each film layer and in the fibrous nonwoven web. Accordingly, Claim 50 is also patentable for at least the same reasons as Claim 21.

As explained above, Branham et al. does not disclose a film/nonwoven laminate wherein each film layer and the fibrous nonwoven layer include a biodegradable thermoplastic polymer. Zhao et al. discloses a biodegradable film, but does not disclose a film/nonwoven laminate wherein each film layer and the fibrous nonwoven layer include a biodegradable thermoplastic polymer. The combined references do not disclose or suggest these limitations.

The Examiner rejected Claim 43 under 35 U.S.C. §103(a) as obvious over Branham et al. in view of Trinh et al. (U.S. Patent 5,714,445). This rejection is respectfully traversed. Claim 43 depends from Claim 21, and is patentable for at least the same reasons.

Furthermore, this rejection is based on hindsight. As explained above, Branham et al. provides no motivation to form every layer in a film/nonwoven laminate using a biodegradable polymer. A person skilled in the art thus would not have been motivated by Branham et al. to use a biodegradable filler such as cyclodextrin. Trinh et al. describes the use of cyclodextrin as an odor control agent. However, the reference does not disclose using cyclodextrin particles as a filler in a film, and then stretching the film to render it breathable by forming voids around the filler particles. The reference discloses placing cyclodextrin particles on a substrate to achieve an odor control benefit (Col. 6, lines 34-60). The cyclodextrin is not mixed into a film, as would be required for a filler and to render a stretched film breathable. Furthermore, Trinh et al. provides no motivation to provide a biodegradable film/nonwoven laminate wherein each film layer and the fibrous nonwoven layer includes a biodegradable polymer. Without the benefit of improper hindsight, the combined references would not lead a person skilled in the art to Applicants' claimed invention.

Applicants believe that the claims, as now presented, are in condition for allowance. Furthermore, because the Amendment involves placing limitations from dependent claims (already considered) into independent claims, the Amendment should be entered after a final rejection. No additional searching is required, and no new issues have been raised.

Respectfully submitted,



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